西藏梅衣科地衣新种*

魏江春 姜玉梅
(中国科学院微生物研究所)

1.**中华袋衣** 新种 图版8:1

Hypogymnia sinica Vej et Jiang, sp. nov. Pl. 8—1.

Species *H. hypotrypellae* (Asah.) Rassad. similis est, sed differt pagina supera thalli grisea vel viridulo-grisea, lobis planis, ostiolis infra apicem loborum sitis, med. K+, P—.

Thallus foliaceus, dichotomus, lobis longis et planis, non inflatis vel subinflatis, ca. 1.5—4 mm latis, apicibus rotundis, supra griseis vel viridulo-griseis, apicem versus brunneis, sed non viridiflavis vel sulphureis, opacis, interdum pro parte corticibus fragilibus vel subsorediosis, subtus aquilis, subnitidis, apicem versus rubiginosis, ostiolis infra-apicalibus subrotundis, ca. 0.5—2 mm diametro.

Cortex superus prosenchymaticus, brunneus, ca. 20.80—31.20 μ crassus; cortex inferus prosenchymaticus, brunneus, ca. 29.12—49.92 μ crassus; stratum algaceum ca. 24.96—41.60 μ crassum; cellulae algae subglobosae, viridiflavae, ca. 6.24—12.48 μ diametro; hypha medullae ca. (1.66) 2.08—4.16 (6.24) μ diametro. Apothecia ignota.

Cortex superus K+ luteus; medulla K+ fulvescens, C-, KC-, P-; atranorinum, chloroatranorinum et acidum non identificatum continens.

Xizang: Nyalam, Qüxiang, DeQingtang, ad corticem Betulae sp., alt. 3660 m, 1966 V 21, leg. Vej T. C. et Chen J. B. 1110 (holotypus) et ad corticem Rhododendroni sp. leg. Vej T. C. et Chen J. B. 1117, 1118-(1), in HMAS** (Beijing) conservatur.

本种类似黄粉袋衣，但衣体上表面灰色至灰绿色，而非黄绿色或硫磺色，下表面孔洞位于裂片近末端处而不位于近裂腋处，髓层K+，P—。

西藏：聂拉木，曲香，德青塘附近，桦树皮上，海拔3,600米，1966、V、21，魏、陈1110（模式标本）；杜鹃灌木上，魏、陈1117、1118-①，保存于中国科学院微生物研究所真菌标本室（缩写：HMAS，下同），北京。

2.**霜袋衣** 新种 图1:1 图版8:2-3

Hypogymnia pruinosa Vej et Jiang, sp. nov. Fig. 1—1; Pl. 8—2,3.

Thallus ad marginem lacinulatus; lobus latus, brevis et non acclivis; pagina infera substrato valde adhaerens; supra pruina alba crassa obtectus; ostiolo apice lobi inter paginam superam et paginam inferam sito.

Thallus foliaceus, subrotundus, rigidus, ad marginem lacinulatus, lobis latis, brevibus et non acclivibus, axillis latis, substrato valde adhaerens pagina infera, supra valde rugosus, vermicularis, fulvus, ad elevationem pruina, margo quae perspicuus, alba crassa obtectus (Pl. 8—3), isidiis sorediisque destitutus, punctis atris aspersis, instructus, subtus ater, subrugosus, ad marginem loborum brunneus, ostiolo apice lobi inter paginam superam et paginam inferam sito.

Cortex superus prosenchymaticus, ca. 21.50—25.80 μ crassus; cortex inferus prosenchymaticus ca. 10.40—14.56 μ crassus; stratum algaceum ca. 20.80—35.35 μ crassum; cellulae algae ca. 7.28—11.44 μ diametro, virides; stratum medullare ca. 3.12—4.16 μ crassum; hypha medullae ca. 2.49—3.12 μ diametro.

Apothecia numerosa, ad centrum thalli aggregata; disci rubiginosi vel aquilis; ascis octosporis, sporis subglobosis., ca. 3.12—4.16μ diametro.

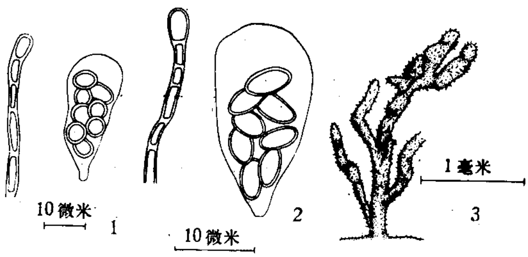


图1 1.霜袋衣 **Hypogymnia pruinosa** 的子囊及子囊孢子； 2.蜡光袋衣 **Hypogymnia laccata** 的子囊及子囊孢子； 3.珊茸梅衣 **Parmelia subverruculifera** 的珊瑚状裂芽及其表面的茸毛。

* 简荔同志描绘插图，苑兰翠同志拍摄部分照片，在拉丁文修改中王文采同志提供了宝贵意见，在此一并致谢。

**Herbarium Mycologicum Instituti Microbiologici Academiae Sinicae.

Cortex superus K＋ luteus; medulla K—, C—, KC＋ aurantiaca, P—; atranorinum, chloroatranorinum et acidum identificatum continens.

Xizang: Changdu, corticola, 1975 VI 1, leg. Zong Y. C. et Liao Y. Z. 215 (holotypus), 217-(1), in HMAS (Beijing) conservatur.

本种衣体近圆形叶状，质地略坚硬，边缘浅裂，裂片宽短而紧贴于基物，上表面腊肠状隆起处覆以浓厚的白色粉霜层，霜层边缘界限清晰(图版8:3)，孔洞位于裂片顶端而不位于下表面，与其他种易于区别。

西藏：昌都，杉树皮上，1976. VI、1，宗、廖215(模式标本)、217-①，保存于 HMAS，北京。

3.**蜡光袋衣**　新种　图1:2，图版8:4。

Hypogymnia laccata Vej et Jiang, sp. nov. Fig. 1—2; Pl. 8—4.

Species *H. bitteri* (Lynge) Ahti et *H. subobscurae* (Vain.) Poelt similis est, sed differt thallo isidiis sorediisque destituto, supra griseo-viridi, pro parte griseo-viridi griseo-albo et brunneo, valde laccato, ad medium valde rugoso, ad marginem plano, med. P＋, chloroatranorinum continens.

Thallus foliaceus, ca. 8 cm. diametro, substrato adhaerens pagina infera, supra griseo-viridis, pro parte griseo-viridis, griseo-albus et brunneus, discolor, subreticulato-foveatus, valde laccatus, pro parte striis et maculis nigris instructus, lobis ca. 1—2 mm latis, apice latioribus, planioribus et subinflatioribus, saepe brunneis et reticulato-foveolatis confusis, ad marginem saepe atris, ad medium valde rugosis, subtus ater, apice brunneus, ostiolo subrotundo magno instructus.

Cortex superus prosenchymaticus,, ca. 8.32—16.64 μ crassus, fulvescens, supra se strato hyalino ca. 2.08—4.16 μ crasso instructus; stratum algaceum ca. 20.80—43.68 μ crassum; cellulae algae subglobosae, ca. 10.40—16.64 μ diametro; hypha medullae ca. 2.08—5.20 μ diametro; cortex inferus prosenchymaticus, aquilus, ca. 12.48—16.64 μ crassus.

Pycnidia subglobosa, ca. 29.12—31.20 μ diametro, pycnidiosporis bacillaribus, ca. 5.20—6.24 × 1.04 μ, hyalinis.

Apothecia ca. 1—8 mm diametro, discis rubiginosis vel aquilis, epithecio brunneo, ca. 6.88—8.32 μ crasso, hymenio 34.40—43.00 μ crasso, hypothecio hyalino ca. 30.10—34.40 μ crasso, ascis pyriformibus, ca. 24.96—29.12 × 8.32—11.44 μ octosporis, sporis ellipsoideis hyalinis, ca. 4.16—6.03 × 2.08—3.32 μ.

Cortex superus K＋ lutescens; medulla K＋ fulvescens, C—, KC＋ rubescens, P＋ lutea, pro parte interdum aurantiaca; chloroatranorinum et acidum physodicum continens.

Xizang: Zuogong, corticola, alt. 4400 m, 1976 VIII 31 leg. Zong Y. C. et Liao Y. Z. 506 (typus) in HMAS (Beijing) conservatur.

本种近似粉球袋衣及亚暗袋衣，但既无粉芽，又无裂芽，上表面具有强烈蜡样光泽，质地较硬，灰绿色，灰白色、淡灰绿色及褐色彼此相杂成花斑，衣体中央处褶皱较明显，边缘较平坦，髓层P＋，含有 Chloroatranorin。

西藏：左贡，杉树上，海拔4,400米，1976 VIII 31，宗、廖506(模式标本)，保存于 HMAS，北京。

4.**珊茸梅衣**　新种　图1:3，图版8:5—6

Parmelia (Melaenoparmelia) **subverruculifera** Vej et Jiang, sp. nov. Fig. 1—3; Pl. 8—5、6,

Species *P. verruculiferae* Nyl. similis est, sed isidiis densis granuliformibus, bacillaribus et coralliformibus, ca. 103—258 μ diametro et ad 2 mm longis differt.

Thallus foliaceus, supra brunneus, valde elevatus et concavus, valde rugosus, isidiis densis granuliformibus, bacillaribus et coralliformibus ca. 103—258 μ diametro et ad 2 mm longis (Fig. 1—3; Pl. 8: 6), tota superficie pilis densis hyalinis setaceis ca. 24—25.80 × 4.30—6.88 μ tectus, subtus ater, ad marginem atro-brunneus, rhizinis concoloribus.

Thallus ca. (107) 129—223.60 (258) μ crassus; cortex superus pseudoparenchymaticus, ca. 6.20—12.90 μ crassus; stratum algaceum ca. 25.80—51.60 μ crassum; cellulae algae virides, ca. 8.32—10.40 μ diametro; medulla ca. 68.80—180.60 μ crassa; hypha medullae 2.08—5.20 μ diametro; cortex inferus pseudoparenchymaticus ca. 6.20—12.90 μ crassus. Apothecia ignota.

Medulla K—, C＋ rubescens, KC＋ subrubescens, P—.

Acidum lecanoricum et non identificatum continens.

Xizang: Nyalam, ad corticem Betulae sp. alt. 3840 m, 1966 VI 22, leg. Vej T. C. et Chen J. B. 1899-(1) (typus) in HMAS (Beijing) conservatur.

本种衣体上表面褐色，在实体显微镜下观察时可见表面密布无色透明的刚毛状茸毛，类似于茸梅衣及瘤茸梅衣，但不同之处在于本种上表面除了颗粒状裂芽外，还密布大量棒状至多分枝的珊瑚状裂芽，其长度可达2毫米；裂芽表面同衣体表面一样密布无色透明的茸毛(插图1:3；图版8—6)。

西藏：聂拉木，桦树皮上，海拔3,840米，1966、VI、22，魏、陈 1899-①(模式标本)，保存于HMAS，北京。

5.藏岛衣 新种 图版 8—7

Cetraria xizangensis Vej et Jiang, sp. nov. Pl. 8—7.

Species *C. pinastri* (Scop.) Röhl. primo adspectu maxime similis est, sed ab ea differt essentialiter sorediis sordido-albis, medulla alba; cortice et medulla K +, medulla P +.

Thallus foliaceus, suborbiculatus vel irreqularis, ca. 1—3 cm. diametro, substrato adhaerens rhizinis, non nisi ad marginem lacinulatus et subacclivis, lobis rotundis interdum pro parte crenulatis, supra stramineis et subunduloso-inaequabilibus, apicem versus sorediosis, sed juventute eis carentibus pruinis albis praeditis sorediis minute granularibus sordido-albis, zonis sorediorum ab apicibus loborum ad media ca. 0.5—2 mm latis, subtus flavidis vel brunneolis, interdum ad marginem subaquilibus, nitidis ubi flavidis et convexis, rhizinis aspersis brunneis vel aquilis.

Thallus ca. (94.64) 139.36—176.80 (195.60) μ crassus; cortex superus pseudoprenchymaticus, brunneolus ca. 20.80—27.04 μ crassus; stratum algaceum ca. 20.80—49.92 μ crassum; cellulae algae ca. 11.44—16.64 μ diametro, virides; stratum medullare ca. 20.80—97.76 μ crassum; hypha medullae ca. 3.12—4.16 μ diametro; cortex inferus pseudoparenchymaticus ca. 16.64—20.80 μ crassus. Apothecia ignota.

Cortex superus K + flavens; medulla alba, K+ flavens, C—, KC—, P+ flavens →aurantiaca; acidum usneicum continens.

Xizang: Nyalam, silvicola, ad corticem Betulae sp., alt. 3,900 m, 1966 VI 22, leg. Vej T. C. et Chen J. B. 1899 (Typus) in HMAS (Beijing) conservatur.

本种初看时近似于黄花岛衣，但不同之处在于粉芽为污白色，髓层白色，皮层K+，髓层K+，P+，不含吴尔品酸 (Vulpinic acid)。

西藏：聂拉木，林内桦树皮上，海拔3,900米，1966、VI、22，魏、陈 1899 (模式标本)，保存于HMAS，北京。

SPECIES NOVAE LICHENUM E PARMELIACEIS IN REGIONE XIZANGENSI

Vej Tzjan-czunj et Jiang Yu-mei

(*Institutum Microbiologicum Academiae Sinicae, Beijing*)

Summary

Five new species of the lichen family Parmeliaceae, namely, *Hypogymnia sinica* Vej et Jiang, *H. pruinosa* Vej et Jiang, *H. laccata* Vej et Jiang, *Parmelia subverruculifera* Vej et Jiang and *Cetraria Xizangensis* Vej et Jiang, all collected from Xizang (Tibet) Autonomous Region are reported. The lichen substances existed in these new species are determined by microchemical tests.